

Amendment to the claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (currently amended) A method of preparing a solution containing biological material, comprising

a) adding a fumed metal oxide to biological material to obtain a solution comprising a mixture of the fumed metal oxide and the biological material; and

b) separating the fumed metal oxide from the mixture to form a resulting solution, wherein pathogenic prion proteins possibly contaminating the biological material are substantially reduced in the resulting solution.

2. (currently amended) A method of preparing a solution containing biological material, comprising

a) adding a fumed metal oxide to biological material to obtain a solution comprising a mixture of the fumed metal oxide and the biological material;

b) separating the fumed metal oxide from the mixture to form a resulting solution; and

c) evaluating the resulting solution for the presence or amount of pathogenic prion protein, wherein pathogenic prion proteins possibly contaminating the biological material are substantially reduced in the resulting solution.

3. (previously presented) The method of claim 2, wherein the biological material is selected from the group consisting of blood-derived products, tissue-derived products, and recombinantly produced products.

4. (previously presented) The method of claim 2, wherein the biological material is a blood-derived product.

5. (previously presented) The method of claim 4, wherein the blood-derived product is of human origin.

6. (previously presented) The method of claim 4, wherein the blood-derived product is selected from the group consisting of immunoglobulins, blood coagulation factors, plasmin, plasminogen, α -1 proteinase inhibitor, and albumin.
7. (currently amended) The method of claim 2, wherein the fumed metal oxide is selected from the group consisting of fumed silica and fumed alumina.
8. (previously presented) The method of claim 2, wherein the fumed metal oxide is fumed silica.
9. (previously presented) The method of claim 8, wherein the fumed silica is characterized by a specific surface area of from about 130 m²/g to about 380 m²/g.
10. (previously presented) The method of claim 8, wherein the fumed silica is characterized by a specific surface area of from about 150 m²/g to about 300 m²/g.
11. (previously presented) The method of claim 8, wherein the fumed silica is characterized by a specific surface area of about 200 m²/g.
12. (currently amended) The method of claim 2, wherein separating the fumed metal oxide from the mixture comprises filtration.
13. (previously presented) The method of claim 12, wherein the filtration comprises passing the mixture through a filtration system which retains particles larger than from about 0.1 μ m to about 5 μ m.
14. (previously presented) The method of claim 12, wherein the filtration comprises passing the mixture through a filtration system which retains particles larger than about 0.8 μ m.

15. (previously presented) The method of claim 2, wherein evaluating the resulting solution for the presence or amount of pathogenic prion protein comprises evaluating a sample for infectivity using an assay selected from the group consisting of an animal bioassay or an immunoassay for the pathogenic prion protein.

16. (previously presented) The method of claim 2, wherein evaluating the resulting solution for the presence or amount of pathogenic prion protein comprises evaluating a sample for the presence of pathogenic prion protein using an immunoassay.

17. (previously presented) The method of claim 16, wherein the immunoassay is selected from the group consisting of Western blots and ELISA assays.

18. (previously presented) The method of claim 16, wherein the immunoassay is a Western blot.

19. (withdrawn-currently amended) The method of claim 2, wherein the fumed metal oxide is fumed alumina ~~aluminum hydroxide~~.

20. (withdrawn-currently amended) The method of claim 19, wherein the fumed alumina ~~aluminum hydroxide~~, as a gel comprising about 2% by weight Al_2O_3 , is present at a concentration from about 0.1% to about 1% ~~to about 10%~~ by weight volume.

21. (withdrawn-currently amended) The method of claim 19, wherein the fumed alumina ~~aluminum hydroxide~~, as a gel comprising about 2% by weight Al_2O_3 , is present at a concentration from about 0.25% to about 0.75% ~~1% to about 5%~~ by weight volume.

22. (withdrawn-currently amended) The method of claim 19, wherein the fumed alumina ~~aluminum hydroxide~~, as a gel comprising about 2% by weight Al_2O_3 , is present at a concentration of about 0.5% 3% by weight volume.

23. (previously presented) A method of preparing a solution containing biological material, comprising

a) adding fumed silica characterized by a specific surface area of from about 150 m²/g to about 300 m²/g to biological material to obtain a solution comprising a mixture of fumed silica and the biological material;

b) separating the fumed silica from the mixture to form a resulting solution by passing the mixture through a filtration system comprising a filter which retains at least a substantial portion of particles of the fumed silica; and

c) evaluating the resulting solution for the presence or amount of pathogenic prion protein using an immunoassay, wherein pathogenic prion proteins possibly contaminating the biological material are substantially reduced in the resulting solution.

24. (previously presented) The method of claim 23, wherein the fumed silica is characterized by a specific surface area of about 200 m²/g, a tap density of about 50 g/l, and an average aggregate particle length of from about 0.2 µm to about 0.3 µm.

25. (previously presented) The method of claim 23, wherein the fumed silica is added in an amount from about 0.1% to about 1.0% (weight/weight) of the solution comprising a mixture of fumed silica and the biological material.

26. (previously presented) The method of claim 23, wherein the fumed silica is added in an amount from about 0.2% to about 0.8% (weight/weight) of the solution comprising a mixture of fumed silica and the biological material.

27. (previously presented) The method of claim 23, wherein the fumed silica is added in an amount of at least about 0.25% (weight/weight) of the solution comprising a mixture of fumed silica and the biological material.

28. (previously presented) The method of claim 23, wherein the fumed silica is added in an amount of at least about 0.5% (weight/weight) of the solution comprising a mixture of fumed silica and the biological material.

29. (currently amended) A method of preparing a solution containing biological material, comprising

a) adding fumed silicon dioxide particles to biological material to obtain a solution comprising a mixture of fumed silicon dioxide particles and the biological material;

b) separating the fumed silicon dioxide particles from the mixture to form a resulting solution; and

c) evaluating the resulting solution for the presence or amount of pathogenic prion protein, wherein pathogenic prion proteins possibly contaminating the biological material are substantially reduced in the resulting solution.

30. (currently amended) The method of claim 29, wherein separating the fumed silicon dioxide particles from the mixture comprises centrifugation or filtration.

31. (withdrawn-currently amended) The method of claim 29, wherein separating the fumed silicon dioxide particles from the mixture comprises centrifugation.

32. (currently amended) A method of separating prions from a sample, comprising

a) contacting a sample in a flowable liquid state with a solid substrate comprising a fumed metal oxide;

b) allowing the sample to remain in contact with the substrate for a time such that prions in the sample bind to the substrate; and

c) separating the sample from the substrate.

33. (currently amended) The method of claim 32, wherein the fumed metal oxide is fumed silicon dioxide or fumed alumina ~~aluminum hydroxide~~.

34. (currently amended) The method of claim 32, wherein the fumed metal oxide is fumed silica.

35. (currently amended) A method of separating prion proteins from a sample and concentrating them for further analysis, the method comprising,

- a) contacting the sample with a particulate fumed metal oxide;
- b) separating the particulate fumed metal oxide from the sample; and
- c) subjecting prion proteins associated with the particulate fumed metal oxide to further analysis.

36. (previously presented) The method of claim 35, wherein the further analysis of prion proteins comprises at least one analytical technique selected from the group consisting of immunoassay, animal bioassay, spectroscopic analysis, and chromatographic analysis.